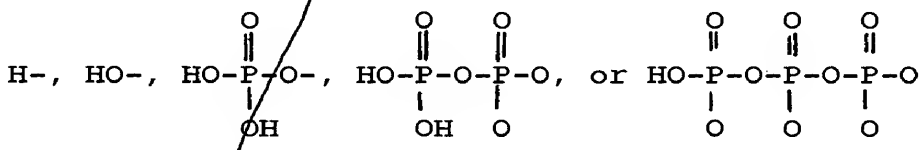
moiety, provided that when B is a purine or pyrimidine, it is attached at the N^9 -position of the purine or deazapurine or deazapurine, and when B is pyrimidine, it is attached at the N^1 position;

wherein A represents a component of a detectable complex and comprises at least three carbon atoms;

wherein B and A are attached together directly or through a linkage group said linkage group not interfering substantially with the characteristic ability of A to form said detectable complex;

wherein if B is a purine, the linkage is attached to the 8 -position of the purine, if B is a deazapurine, the linkage is attached to the 7 -position of the deazapurine, and B is a pyrmidine, the linkage is attached to the 5 -position of the pyrimidine; and

wherein each of x,y and z represents:

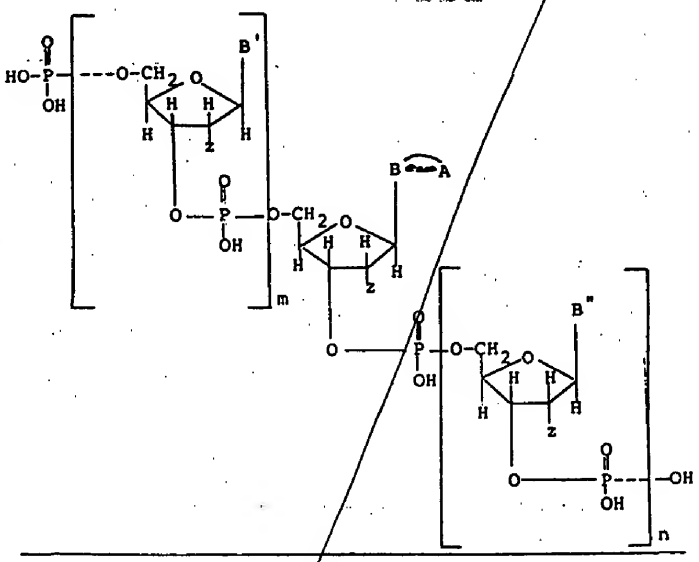


and which composition further comprises at least one additional component including a polypeptide capable of directly or indirectly forming said complex with A [said compound].

102. (amended) A [chemical complex] composition in accordance with claim 101 wherein said poylpeptide includes a moiety which can be detected.

103. (amended) A [chemical complex] composition in accordance with claim 102 wherein said detectable moiety is a fluorescent dye, [eletron] electron dense protein, or enzyme capable of [depositing an insoluble] producing a detectable reaction product.

110. (amended) A [chemical complex] composition comprising a compound [in accodance with Claim 47] having the structure:



wherein each of B, B', and B'' respresents a purine, deaza-purine, or pyrimidine moiety covalently bonded to the $C^{1'}$ -position of the sugar moiety, provided that whenever B, B' or B'' is purine or deazapurine, it is attached at the N^9 -position of the purine or deazapurine, and whenever B, B' or B'' is a pyrimidine, it is attached at the N^1 -position;

wherein A represnts a component of a detectable complex and comprises at least three carbon atoms;

wherein B and A are attached together directly or through a linkage group, said linkage group not interfering substantially with the characteristic ability of A to form said detectable complex;

wherein if B is purine, the linkage is attached to the 8-position of the purine, if B is deazapurine, the linkage is attached to the 7-position of the deazapurine, and if B is a

pyrimidine the linkage is attached to the 5-position of the pyrimidine;

wherein z represents H or HO; and which composition further comprises at least one additional component including a polypeptide capable of directly or indirectly of forming said complex with A [said compound].

111. (amended) A [chemical complex] composition in accordance with claim 110 wherein said polypeptide includes a moiety which can be detected.

112. (amended) A [chemical complex] composition in accordance with claim 111 wherein said detectable moiety is a fluorescent dye, electron dense protein, or enzyme capable of [depositing an insoluble] producing a detectable reaction product.

In claim 138, line 1, delete "Claim 1" and insert --claim 101--.

In claim 139, line 1, delete "claim 1" and insert --claim 101--.

Kindly add the following claims:

146. The composition of claim 101 or 110 wherein A is a ligand.

147. The composition claim 146 wherein said ligand comprises at least 3 carbon atoms.

148. The composition of claim 146 wherein said ligand comprises a specific binding protein.

149. The composition of claim 101 or 110 wherein the polypeptide is detectable either by means inherent in the polypeptide or by means of detectable moieties which are attached thereto.

150. The composition of claim 149 wherein said polypeptide comprises a polypeptide selected from the group consisting of avidin and streptavidin, to which are attached either biotin or iminobiotin having a detectable moiety attached thereto.

151. The composition of claim 149 wherein said second component comprises a polypeptide which is an enzyme and which further comprises a substrate which interacts with said enzyme to form a detectable product.

REMARKS

The above amendments have been made to simplify and to more particularly recite the modified nucleotides and polynucleotides of this divisional application.

For example, applicant has amended claim 47 to recite the structure of compositions formed by the modified nucleotides of this invention. Support for claims 47 and 102 appears at pages 10-12 (all lines). Claims 102 and 103 recite that the complexes may be used in conjunction with particular labels in order to render them detectable. Support for claim 103 appears at page 28, lines 3-7.

Support for claim 110 appears at page 25 (entire page) and 26, lines 1-3. Support for claim 111 appears at page 25 lines 10-12. Support for claim 112 appears at page 28, lines 3-7. Support for claim 146 appears at page 12, line 6. Support for claim 147 appears at page 7, lines 16-19 and page 25 lines 10-13. Support for claim 148 appears at page 27, lines 32 and 33 and at page 30 (the drawing). Support for claim 103 appears at page 8, lines 17-25 and at page 27, lines 24-31. Support for claim 150 appears at page 28, lines 1-7. Support for claim 105 appears at page 3, line 35.